Subpart YY—National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards

Source: 64 FR 34921, June 29, 1999, unless otherwise noted.

§63.1100 Applicability.

(a) General. This subpart applies to source categories and affected sources specified in §63.1103(a) through (d) of this subpart. The affected emission points, by source category, are summarized in table 1 of this section. This table also delineates the section and paragraph of the rule that directs an owner or operator of an affected source to source category-specific control, monitoring, recordkeeping, and reporting requirements.

TABLE 1 TO § 63.1100(A).—SOURCE CATEGORY MACT^a APPLICABILITY

Source category	Storage ves-	Process vents Transfer racks	Transfer racks	Equipment leaks	Wastewater streams	Other	Source category MACT require- ments
Acetal Resins Production Yes No Yes No No Yes No Yes No No	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes No Yes	Yes	Yes No	No	§ 63.1103(a) § 63.1103(b) § 63.1103(c) § 63.1103(d)

 $^{^{\}rm a}\text{Maximum}$ achievable control technology. $^{\rm b}$ Fiber spinning lines using scrylonitrile. $^{\rm b}$ Fiber spinning lines using spinning solution or suspension containing acrylonitrile.

- (b) Subpart A requirements. The following provisions of subpart A of this part (General Provisions), §§ 63.1 through 63.5, and §§ 63.12 through 63.15, apply to owners or operators of affected sources subject to this subpart.
- (c) Research and development facilities. The provisions of this subpart do not apply to research and development facilities, consistent with section 112(b)(7) of the Act.
- (d) Primary product determination and applicability. The primary product of a process unit shall be determined according to the procedures specified in paragraphs (d)(1) and (2) of this section. Paragraphs (d(3), (4), and (5) of this section discuss compliance for those process units operated as flexible operation units.
- (1) If a process unit only manufactures one product, then that product shall represent the primary product of the process unit.
- (2) If a process unit is designed and operated as a flexible operation unit, the primary product shall be determined as specified in paragraphs (d)(2)(i) or (ii) of this section based on the anticipated operations for the 5 years following the promulgation date for existing affected sources and for the first 5 years after initial startup for new affected sources.
- (i) If the flexible operation unit will manufacture one product for the greatest percentage of operating time over the five-year period, then that product shall represent the primary product of the flexible operation unit.
- (ii) If the flexible operation unit will manufacture multiple products equally based on operating time, then the product with the greatest production on a mass basis over the five-year period shall represent the primary product of the flexible operation unit.
- (3) Once the primary product of a process unit has been determined to be a product produced by a source category subject to this subpart, the owner or operator of the affected source shall comply with the standards for the primary product production process unit.
- (4) The determination of the primary product for a process unit, including the assessment of applicability of this subpart to process units that are de-

- signed and operated as flexible operation units, shall be reported in the Notification of Compliance Status Report required by §63.1110(a)(4) when the primary product is determined to be a product produced by a source category subject to requirements under this subpart. The Notification of Compliance Status shall include the information specified in either paragraph (d)(4)(i) or (ii) of this section. If the primary product is determined to be something other than a product produced by a source category subject to requirements under this subpart, the owner or operator shall retain information, data, and analyses used to document the basis for the determination that the primary product is not produced by a source category subject to requirements under this subpart.
- (i) If the process unit manufactures only one product subject to requirements under this subpart, the identity of that product.
- (ii) If the process unit is designed and operated as a flexible operation unit, the information specified in paragraphs (d)(4)(ii)(A) through (C) of this section, as appropriate.
- (A) The identity of the primary product.
- (B) Information concerning operating time and/or production mass for each product that was used to make the determination of the primary product under paragraph (d)(2)(i) or (ii) of this section.
- (5) When a flexible operation unit that is subject to this subpart is producing a product other than a product subject to this subpart, or is producing a product subject to this subpart that is not the primary product, the owner or operator shall comply with either paragraph (d)(5) (i) or (ii) of this section for each emission point.
- (i) The owner or operator shall control emissions during the production of all products in accordance with the requirements for the production of the primary product. As appropriate, the owner or operator shall demonstrate that the parameter monitoring level established for the primary product is also appropriate for those periods when products other than the primary product are being produced. Documentation

of this demonstration shall be submitted in the Notification of Compliance Status report required by §63.1110(a)(4).

- (ii) The owner or operator shall determine, for the production of each product, whether control is required in accordance with the applicable criteria for the primary product in §63.1103. If control is required, the owner or operator shall establish separate parameter monitoring levels, as appropriate, for the production of each product. The parameter monitoring levels developed shall be submitted in the Notification of Compliance Status report required by §63.1110(a)(4).
- (e) Storage vessel ownership determination. To determine the process unit to which a storage vessel shall belong, the owner or operator shall sequentially follow the procedures specified in paragraphs (e)(1) through (8) of this section, stopping as soon as the determination is made.
- (1) If a storage vessel is already subject to another subpart of this part on the date of promulgation for an affected source under the generic MACT, that storage vessel shall belong to the process unit subject to the other subpart.
- (2) If a storage vessel is dedicated to a single process unit, the storage vessel shall belong to that process unit.
- (3) If a storage vessel is shared among process units, then the storage vessel shall belong to that process unit located on the same plant site as the storage vessel that has the greatest input into or output from the storage vessel (i.e., the process unit has the predominant use of the storage vessel.)
- (4) If predominant use cannot be determined for a storage vessel that is shared among process units and if only one of those process units is subject to this subpart, the storage vessel shall belong to that process unit.
- (5) If predominant use cannot be determined for a storage vessel that is shared among process units and if more than one of the process units are subject to standards under this subpart that have different primary products, then the owner or operator shall assign the storage vessel to any one of the process units sharing the storage vessel.

- (6) If the predominant use of a storage vessel varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding the date of promulgation of standards for an affected source under this subpart or based on the expected utilization for the 5 years following the promulgation date of standards for an affected source under this subpart for existing affected sources, whichever is more representative of the expected operations for that storage vessel, and based on the expected utilization for the 5 years after initial startup for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status Report required by §63.1110(a)(4). If the predominant use changes, the redetermination of predominant use shall be reported in the next Periodic Report.
- (7) If the storage vessel begins receiving material from (or sending material to) another process unit; ceases to receive material from (or send material to) a process unit; or if the applicability of this subpart to a storage vessel has been determined according to the provisions of paragraphs (e)(1) through (6) of this section and there is a significant change in the use of the storage vessel that could reasonably change the predominant use, the owner or operator shall reevaluate the applicability of this subpart to the storage vessel.
- (8) Where a storage vessel is located at a major source that includes one or more process units that place material into, or receive materials from, the storage vessel, but the storage vessel is located in a tank farm, the applicability of this subpart shall be determined according to the provisions in paragraphs (e)(8)(i) through (iii) of this section.
- (i) The storage vessel may only be assigned to a process unit that utilizes the storage vessel and does not have an intervening storage vessel for that product (or raw material, as appropriate). With respect to any process unit, an intervening storage vessel means a storage vessel connected by hard-piping to the process unit and to the storage vessel in the tank farm so that product or raw material entering

or leaving the process unit flows into (or from) the intervening storage vessel and does not flow directly into (or from) the storage vessel in the tank farm.

(ii) If there is only one process unit at a major source that meets the criteria of paragraph (e)(8)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to that process unit.

(iii) If there are two or more process units at the major source that meet the criteria of paragraph (e)(8)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to one of those process units according to the provisions of paragraph (e)(6) of this section. The predominant use shall be determined among only those process units that meet the criteria of paragraph (e)(8)(i) of this sec-

- (f) Recovery operation equipment ownership determination. To determine the process unit to which recovery equipment shall belong, the owner or operator shall sequentially follow the procedures specified in paragraphs (f)(1)through (7) of this section, stopping as soon as the determination is made.
- (1) If recovery operation equipment is already subject to another subpart of this part on the date standards are promulgated for an affected source, that recovery operation equipment shall belong to the process unit subject to the other subpart.

(2) If recovery operation equipment is used exclusively by a single process unit, the recovery operation shall belong to that process unit.

- (3) If recovery operation equipment is shared among process units, then the recovery operation equipment shall belong to that process unit that has the greatest input into or output from the recovery operation equipment (i.e., that process unit has the predominant use of the recovery operation equipment).
- (4) If predominant use cannot be determined for recovery operation equipment that is shared among process units and if one of those process units is a process unit subject to this subpart, the recovery operation equipment shall belong to the process unit subject to this subpart.

(5) If predominant use cannot be determined for recovery operation equipment that is shared among process units and if more than one of the process units are process units that have different primary products and that are subject to this subpart, then the owner or operator shall assign the recovery operation equipment to any one of

those process units.

- (6) If the predominant use of recovery operation equipment varies from year to year, then the predominant use shall be determined based on the utilization that occurred during the year preceding the promulgation date of standards for an affected source under this subpart or based on the expected utilization for the 5 years following the promulgation date for standards for an affected source under this subpart for existing affected sources, whichever is the more representative of the expected operations for the recovery operations equipment, and based on the expected utilization for the first 5 years after initial startup for new affected sources. This determination shall be reported in the Notification of Compliance Status Report required by §63.1110(a)(4). If the predominant use changes, the redetermination of predominant use shall be reported in the next Periodic Report.
- (7) If there is an unexpected change in the utilization of recovery operation equipment that could reasonably change the predominant use, the owner or operator shall redetermine to which process unit the recovery operation belongs by reperforming the procedures specified in paragraphs (f)(2) through (6) of this section.
- (g) Overlap with other regulations. Paragraphs (g)(1) through (4) of this section specify the applicability of subpart YY emission point requirements when other rules may apply. Where subpart YY of this part allows an owner or operator an option to comply with one or another regulation to comply with subpart YY of this part, an owner or operator must report which regulation they choose to comply with in the Notification of Compliance Status report required by §63.1110(a)(4).
- (1) Overlap of subpart YY with other regulations for storage vessels. (i) After the compliance dates specified in

§63.1102 for an affected source subject to this subpart, a storage vessel that is part of an existing source that is subject to the storage vessel requirements of this subpart and the storage vessel requirements of subpart G (the hazardous organic national emission standards for hazardous air pollutants (the HON)) of this part is in compliance with the requirements of this subpart if it complies with either such requirement and has notified the Administrator in the Notification of Compliance Status report required §63.1110(a)(4).

(ii) After the compliance dates specified in §63.1102 for an affected source subject to this subpart, a storage vessel that is part of an existing source that is subject to the storage vessel requirements of this subpart and to the storage vessel requirements of subpart Ka or Kb of part 60 is required only to comply with the storage vessel requirements of this subpart.

(2) Overlap of subpart YY with other regulations for process vents. After the compliance dates specified in §63.1102 for an affected source subject to this subpart, a process vent that is part of an existing source that is subject to the process vent requirements of this subpart and to the process vent requirements of subpart G (the HON) of this part is in compliance with this subpart if it complies with either such requirement and has notified the Administrator in the Notification of Compliance Status report required by §63.1110(a)(4).

(3) Overlap of subpart YY with other regulations for transfer racks. After the compliance dates specified in §63.1102 for an affected source subject to this subpart, a transfer rack that is part of an existing source that is subject to the transfer rack requirements of this subpart and to the transfer rack requirements of subpart G (the HON) of this part is in compliance with this subpart if it complies with either such requirement and has notified the Administrator in the Notification of Compliance Status report required by §63.1110(a)(4).

(4) Overlap of subpart YY with other regulations for equipment leaks. (i) After the compliance dates specified in §63.1102 for an affected source subject

to this subpart, equipment that is part of an existing source that is subject to the equipment leak control requirements of subpart TT (National Emission Standards for Equipment Leaks—Control Level 1) pursuant to this subpart and to the equipment leak control requirements of subpart VV of part 60 or subpart V of part 61 is required only to comply with the equipment leak requirements of this subpart.

(ii) After the compliance dates specified in §63.1102 for an affected source subject to this subpart, equipment that is part of an existing source that is subject to the equipment leak control requirements of subpart UU (National Emission Standards for Equipment Leaks-Control Level 2) of this part pursuant to this subpart and to the equipment leak control requirements of subpart H (the HON) or subpart I of this part is in compliance with the equipment leak control requirements of this subpart if it complies with either such requirement and has notified the Administrator in the Notification of Compliance Status report required by §63.1110(a)(4).

§63.1101 Definitions.

All terms used in this subpart shall have the meaning given them in the Act, in 40 CFR 63.2 (General Provisions), and in this section.

Batch cycle refers to manufacturing a product from start to finish in a batch unit operation.

Batch emission episode means a discrete venting episode that may be associated with a single unit operation. A unit operation may have more than one batch emission episode per batch cycle. For example, a displacement of vapor resulting from the charging of a vessel with organic HAP will result in a discrete emission episode. If the vessel is then heated, there may also be another discrete emission episode resulting from the expulsion of expanded vapor. Both emission episodes may occur during the same batch cycle in the same vessel or unit operation. There are possibly other emission episodes that may occur from the vessel or other process equipment, depending on process operations.

Batch unit operation means a unit operation involving intermittent or discontinuous feed into equipment and, in general, involves the emptying of equipment after the batch cycle ceases and prior to beginning a new batch cycle. Mass, temperature, concentration and other properties of the process may vary with time. Addition of raw material and withdrawal of product do not simultaneously occur in a batch unit operation.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

By compound means by individual stream components, not carbon equivalents.

Capacity means the volume of liquid that is capable of being stored in a storage vessel, determined by multiplying the vessel's internal cross-sectional area by the internal height of the shell.

Closed vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device. A closed vent system does not include the vapor collection system that is part of any tank truck or railcar or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Combined vent stream means a combination of emission streams from continuous and/or batch unit operations.

Compliance equipment means monitoring equipment used by an owner or operator of an affected source under this subpart to demonstrate compliance with an operation or emission limit standard.

Continuous parameter monitoring system or CPMS means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, and that is used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Continuous unit operation means a unit operation where the inputs and

outputs flow continuously. Continuous unit operations typically approach steady-state conditions. Continuous unit operations typically involve the simultaneous addition of raw material and withdrawal of the product.

Control device means, with the exceptions noted below, a combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart or a referencing subpart. For process vents from continuous unit operations at affected sources in source categories where the applicability criteria includes a TRE index value, recovery devices are not considered to be control devices. Primary condensers on steam strippers or fuel gas systems are not considered to be control devices.

Day means a calendar day.

Distillate receiver means overhead receivers, overhead accumulators, reflux drums, and condenser(s) including ejector condenser(s) associated with a distillation unit.

Distillation unit means a device or vessel in which one or more feed streams are separated into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and the vapor phases by vaporization and condensation as they approach equilibrium within the distillation unit. Distillation unit includes the distillate receiver, reboiler, and any associated vacuum pump or steam jet.

Emission point means an individual process vent, storage vessel, transfer rack, wastewater stream, kiln, fiber spinning line, equipment leak, or other point where a gaseous stream is released

Equipment means each of the following that is subject to control under this subpart: pump, compressor, agitator, pressure relief device, sampling collection system, open-ended valve or line, valve, connector, instrumentation system, and surge control vessel and bottoms in organic hazardous air pollutant service as defined in §63.1103 for the applicable chemical manufacturing production unit; and any control device

or system used to comply with this subpart.

Equivalent method means any method of sampling and analysis for an air pollutant that has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess emissions means emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the owner or operator complied with the relevant provisions of this subpart.

Final recovery device means the last recovery device on a process vent stream from a continuous unit operation at an affected source in a source category where the applicability criteria includes a TRE index value. The final recovery device usually discharges to a combustion device, recapture device, or directly to the atmosphere.

Flexible operation unit means a process unit that manufactures different chemical products periodically by alternating raw materials or operating conditions.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as a fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Halogens and hydrogen halides means hydrogen chloride (HCl), chlorine (Cl2), hydrogen bromide (HBr), bromine (Br2), and hydrogen fluoride (HF).

Impurity means a substance that is produced coincidentally with the primary product, or is present in a raw material. An impurity does not serve a useful purpose in the production or use of the primary product and is not isolated.

Initial startup means, for new sources, the first time the source begins production. For additions or changes not defined as a new source by this subpart, initial startup means the first time ad-

ditional or changed equipment is put into operation. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent startup (as defined in this section) of process units following malfunctions or process unit shutdowns. Except for equipment leaks, initial startup also does not include subsequent startups (as defined in this section) of process units following changes in product for flexible operation units or following recharging of equipment in batch unit operations.

Low throughput transfer rack means a transfer rack that transfers less than a total of 11.8 million liters per year of liquid containing regulated HAP.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred liquid at the temperature equal to the highest calendarmonth average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

- (1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporation Loss From External Floating-Roof Tanks (incorporated by reference as specified in §63.14 of subpart A of this part); or
- (2) As obtained from standard reference texts; or
- (3) As determined by the American Society for Testing and Materials Method D2879-83 (incorporated by reference as specified in §63.14 of subpart A of this part); or
- (4) Any other method approved by the Administrator.

On-site means, with respect to records required to be maintained by this subpart, a location within a plant

site that encompasses the affected source. On-site includes, but is not limited to, the affected source to which the records pertain, or central files elsewhere at the plant site.

Organic hazardous air pollutant or organic HAP means any organic chemicals that are also HAP.

Permitting authority means one of the following:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661) and part 71 of this chapter.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of a process. The condenser must support a vapor-to-liquid phase change for periods of source equipment operation that are above the boiling or bubble point of substance(s). Examples of process condensers include distillation condensers, reflux condensers, process condensers in line prior to the vacuum source, and process condensers used in stripping or flashing operations.

Process unit means the equipment assembled and connected by pipes or ducts to process raw and/or intermediate materials and to manufacture an intended product. A process unit includes more than one unit operation. A process unit includes, but is not limited to, process vents, storage vessels, and equipment.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit, or part of a process unit during which practice or procedure it is technically feasible to clear process material from the process unit, or part of the process unit, consistent with safety con-

straints and during which repairs can be effected. The following are not considered process unit shutdowns:

- (1) An unscheduled work practice or operational procedure that stops production from a process unit, or part of a process unit, for less than 24 hours.
- (2) An unscheduled work practice or operational procedure that would stop production from a process unit, or part of a process unit, for a shorter period of time than would be required to clear the process unit, or part of the process unit, of materials and start up the unit and result in greater emissions than delay of repair of leaking components until the next scheduled process unit shutdown.
- (3) The use of spare equipment and technically feasible bypassing of equipment without stopping production.

Process vent means a piece of equipment that processes a gas stream (both batch and continuous streams) during operation of the unit within a manufacturing process unit that meets the applicability criteria of this subpart. Process vents process gas streams that are either discharged directly to the atmosphere or are discharged to the atmosphere after diversion through a product recovery device. Process vents include vents from distillate receivers, product separators, and ejector-condensers. Process vents exclude relief valve discharges and leaks from equipment regulated under this subpart. Process vents that process gas streams containing less than or equal to 0.005 weight-percent organic HAP are not subject to the process vent requirements of this subpart.

Product means a compound or chemical which is manufactured as the intended product of the applicable production process unit as defined in §63.1103. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Recapture device means an individual unit of equipment capable of and used for the purpose of recovering chemicals, but not normally for use, reuse, or sale. For example, a recapture device may recover chemicals primarily for disposal. Recapture devices include,

but are not limited to, absorbers, carbon adsorbers, and condensers. For purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value. Examples of equipment that may be recovery deabsorbers, carbon vices include adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. For purposes of the monitoring, recordkeeping, and reporting requirements of this subpart, recapture devices are considered recovery devices.

Research and development facility means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and is not engaged in the manufacture of products for commercial sale, except in a de minimis manner.

Shutdown means the cessation of operation of a regulated source and equipment required or used to comply with this subpart, or the emptying and degassing of a storage vessel. Shutdown is defined here for purposes of including, but not limited to, periodic maintenance, replacement of equipment, or repair. Shutdown does not include the routine rinsing or washing of equipment in batch operation between batches.

Startup means the setting into operation of a regulated source and/or equipment required or used to comply with this subpart. Startup includes initial startup, operation solely for testing equipment, the recharging of equipment in batch operation, and transitional conditions due to changes in product for flexible operation units.

Storage vessel or Tank, for the purposes of this subpart, means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or

plastic) that provide structural support and is designed to hold an accumulation of liquids or other materials. Storage vessel does not include:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
 - (2) Bottoms receiver tanks;
 - (3) Surge control vessels; or
 - (4) Vessels storing wastewater.

Subsequent startup means any setting into operation of a regulated source and/or equipment required or used to comply with this subpart following the initial startup.

Surge control vessel means a feed drum, recycle drum, or intermediate vessel. Surge control vessels are used within a process unit (as defined in this subpart) when in-process storage, mixing, or management of flow rates or volumes is needed to assist in production of a product.

Total organic compounds or TOC means those compounds, excluding methane and ethane, measured according to the procedures of Method 18 or Method 25A of appendix A of part 60.

Total resource effectiveness index value or TRE index value means a measure of the supplemental total resource requirement per unit reduction of organic HAP associated with a process vent stream, based on vent stream flow rate, emission rate of organic HAP, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds), as quantified by the equations given under §63.1104(e).

Transfer rack means a single system used to fill bulk cargo tanks mounted on or in a truck or railcar. A transfer rack includes all loading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Unit operation means distinct equipment used in processing, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation

columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Vapor balancing system means a piping system that is designed to collect organic HAP vapors displaced from tank trucks or railcars during loading; and to route the collected organic HAP vapors to the storage vessel from which the liquid being loaded originated, or to compress collected organic HAP vapors and commingle with the raw feed of a production process unit.

§63.1102 Compliance schedule.

- (a) General requirements. Affected sources, as defined in §63.1103(a)(1)(i) resins production; acetvl §63.1103(b)(1)(i) for acrylic and modacrylic fiber production; §63.1103(c)(1)(i) for hydrogen fluoride production; or §63.1103(d)(1)(i) polycarbonate production, shall comply with the appropriate provisions of this subpart and the subparts referenced by this subpart according to the schedule described in paragraph (a)(1) or (2) of this section, as appropriate.
- (1) Compliance dates for new and reconstructed sources. (i) The owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after October 14, 1998 that has an initial startup before the effective date of standards for an acetal resins, acrylic and modacrylic hydrogen fluoride, polycarbonate production affected source under this subpart shall comply with this subpart no later than the effective date of standards for the affected source.
- (ii) The owner or operator of a new or reconstructed acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, or polycarbonate production affected source that has an initial startup after the effective date of standards for the affected source shall comply with this subpart upon startup of the source.
- (iii) The owner or operator of an acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, or polycarbonate production affected source for which construction or reconstruction is commenced after October 14, 1998 but before the effective date of standards for the affected source under this subpart

shall comply with this subpart no later than July 1, 2002 if:

- (A) The promulgated standard is more stringent than the proposed standard; and
- (B) The owner or operator complies with this subpart as proposed during the 3-year period immediately after the effective date of standards for an acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, or polycarbonate production affected source.
- (2) Compliance dates for existing sources. (i) The owner or operator of an existing acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, or polycarbonate production affected source shall comply with the requirements of this subpart within 3 years after the effective date of standards for the affected source.
- (ii) The owner or operator of an acetal resins, acrylic and modacrylic fiber, hydrogen fluoride, or polycarbonate production nonmajor source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to the relevant standards for existing sources under this subpart. Such sources shall comply with the relevant standard within 3 years of becoming a major source.

§63.1103 Source category-specific applicability, definitions, and requirements.

- (a) Acetal resins production applicability, definitions, and requirements—(1) Applicability—(i) Affected source. For the acetal resins production source category (as defined in paragraph (a)(2) of this section), the affected source shall comprise all emission points, in combination. listed in paragraphs (a)(1)(i)(A) through (D) of this section, that are associated with an acetal resins production process unit located at a major source, as defined in section 112(a) of the Clean Air Act (Act).
- (A) All storage vessels that store liquids containing organic HAP.
- (B) All process vents from continuous unit operations (front end process vents and back end process vents).
- (C) All wastewater streams associated with the acetal resins production process unit as defined in (a)(2) of this section.

- (D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts organic HAP.
- (ii) *Compliance schedule*. The compliance schedule for affected sources as defined in paragraph (a)(1)(i) of this section is specified in §63.1102(a).

(2) Definitions.

Acetal resins production means the production of homopolymers and/or copolymers of alternating oxymethylene units. Acetal resins are also known as polyoxymethylenes, polyacetals, and aldehyde resins. Acetal resins are generally produced by polymerizing formaldehyde (HCHO) with the methylene functional group (CH₂) and are characterized by repeating oxymethylene units (CH₂O) in the polymer backbone.

Back end process vent means any process vent from a continuous unit operation that is not a front end process vent up to the final separation of raw materials and by-products from the stabilized polymer.

Front end process vent means any process vent from a continuous unit operation involved in the purification

of formaldehyde feedstock for use in the acetal homopolymer process. All front end process vents are restricted to those vents that occur prior to the polymer reactor.

(3) Requirements. Table 1 of this section specifies the acetal resins production standards applicability for existing and new sources. Applicability assessment procedures and methods are specified in §§ 63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§ 63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in table 1 of this section.

Table 1. To §63.1103(a)—What Are My Requirements If I Own Or Operate An Acetal Resins Production Existing Or New Affected Source?

If you own or operate	And if	Then you must
A storage vessel with: 34 cubic meters < capacity.	The maximum true vapor pressure of organic HAP > 17.1 kilopascals (for existing sources) or > 11.7 kilopascals (for new sources).	a. Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part; or b. Comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
A front end process vent from continuous unit operations.		a. Reduce emissions of total organic HAP by using a flare meeting the requirements of subpart SS of this part; or b. Reduce emissions of total organic HAP by 60 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process post-control experiments) of this action.
A back end process vent from continuous unit operations.	The vent stream has a a TRE ^a < 1.0	vent requirements) of this part. a. Reduce emissions of total organic HAP by using a flare meeting the requirements of subpart SS of this part; or

TABLE 1. TO § 63.1103(a)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACETAL RESINS PRODUCTION EXISTING OR NEW AFFECTED SOURCE?—Continued

If you own or operate	And if	Then you must
		b. Reduce emissions of total organic HAP by 98 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process vent requirements) of this part; or c. Achieve and maintain a TRE index value greater than 1.0.
A back end process vent from continuous unit operations.	1.0 ≤ TREa ≤ 4.0	Monitor and keep records of equipment operating parameters specified to be monitored under subpart SS, §§ 63.990(c)(absorber, condenser, and carbon adsorber monitoring) or 63.995(c) (other noncombustion systems used as a control device monitoring) of this part.
5. Equipment as defined under §63.1101	The equipment contains or contacts ≥ 10 weight-percent organic HAP ^b , and operates ≤ 300 hours per year.	Comply with the requirements of subpart TT (national emission standards for equipment leaks (control level 1)) or subpart UU (national emission standards for equipment leaks (control level 2)) of this part.

a The TRE is determined according to the procedures specified in §63.1104(j). bThe weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

- (b) Acrylic and modacrylic fiber production applicability, definitions, and requirements. (1) Applicability. (i) Affected source. For the acrylic fibers and modacrylic fibers production (as defined in paragraph (b)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (b)(1)(i)(A) through (E) of this section, that are associated with a suspension or solution polymerization process unit that produces acrylic and modacrylic fiber located at a major source as defined in section 112(a) of the Act.
- (A) All storage vessels that store liquid containing acrylonitrile or organic
- (B) All process vents from continuous unit operations.
- (C) All wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in (b)(2) of this section.
- (D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts acrylonitrile or organic HAP.
- (E) All acrylic and modacrylic fiber spinning lines using a spinning solution or suspension having organic acry-

lonitrile or organic HAP. For the purposes of implementing this paragraph, a spinning line includes the spinning solution filters, spin bath, and the equipment used downstream of the spin bath to wash, dry, or draw the spun fiber.

(ii) Compliance schedule. The compliance schedule, for affected sources as defined in paragraph (b)(1)(i) of this section, is specified in §63.1102(a).

(2) Definitions.

Acrylic fiber means a manufactured synthetic fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 85 percent by weight of acrylonitrile units.

Acrylic and modacrylic fibers production means the production of either of the following synthetic fibers composed of acrylonitrile units:

- (i) Acrylic fiber.
- (ii) Modacrylic fiber.

Acrylonitrile solution polymerization means a process where acrylonitrile and comonomers are dissolved in a solvent to form a polymer solution (typically polyacrylonitrile).

polyacrylonitrile is soluble in the solvent. In contrast to suspension polymerization, the resulting reactor polymer solution (spin dope) is filtered and pumped directly to the fiber spinning process.

Acrylonitrile suspension polymerization means a polymerization process where small drops of acrylonitrile and comonomers are suspended in water in the presence of a catalyst where they polymerize under agitation. Solid beads of polymer are formed in this suspension reaction which are subsequently filtered, washed, refiltered, and dried. The beads must be subsequently redissolved in a solvent to create a spin dope prior to introduction to the fiber spinning process.

Fiber spinning line means the group of equipment and process vents associated with acrylic or modacrylic fiber spinning operations. The fiber spinning line includes (as applicable to the type of spinning process used) the blending and dissolving tanks, spinning solution filters, wet spinning units, spin bath tanks, and the equipment used downstream of the spin bath to wash, dry, or draw the spun fiber.

Modacrylic fiber means a manufactured synthetic fiber in which the fiber-forming substance is any long-chain synthetic polymer composed of at least 35 percent by weight of acrylo-

nitrile units but less than 85 percent by weight of acrylonitrile units.

Spin dope means the liquid mixture of polymer and solvent that is fed to the spinneret to form the acrylic and modacrylic fibers.

- (3) Requirements. An owner or operator of an affected source must comply with the requirements of paragraph (b)(3)(i) or (ii) of this section.
- (i) Table 2 of this section specifies the acrylic and modacrylic fiber production source category control requirement applicability for both existing and new sources. Applicability assessment procedures and methods are specified in §§ 63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§ 63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in table 2 of this section.

TABLE 2.—TO §63.1103(B)(3)(I)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (B)(3)(I) OF THIS SECTION?

If you own or operate	And if	Then you must
1. A storage vessel	The stored material is acrylonitrile	a. Reduce emissions of acrylonitrile by 98 weight-percent by venting emissions through a closed vent system to any combination of control device meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part, or 95 weight-percent or greater by venting through a closed vent system to a recovery device meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), §63.993 (recovery device requirements) of this part; or

TABLE 2.—TO §63.1103(B)(3)(I)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (B)(3)(I) OF THIS SECTION?—Continued

If you own or operate	And if	Then you must
A process vent from continuous unit operations (halogenated).	The vent steam has a mass emission rate of halogen atoms contained in organic compounds ≥0.45 kilograms per hour and an acrylonitrile concentration ≥50 parts per million by volume and an average flow rate ≥0.005 cubic meters per minute.	b. Comply with the requirements of sub- part WW (national emission standards for storage vessels (control level 2)) of this part. a. Reduce emissions of acrylonitrile or TOC as specified for nonhalogenated process vents from continuous unit operations (other than by using a flare) by venting emissions through a closed vent system to a halogen re- duction device meeting the require- ments of subpart SS, §63.994 (halo- gen reduction devices requirements) of this part that reduces hydrogen halides and halogens by 99 weight- percent or to less than 0.45 kilograms per year, whichever is less stringent; or
3. A process vent from continuous unit operations (nonhalogenated).	The vent steam has a mass emission rate of halogen atoms contained in organic compounds <0.45 kilograms per hour³, and an acrylonitrile concentration ≥50 parts per million by volume and an average flow rate ≥0.005 cubic meters per minute.	b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, §63.994 (halogen reduction devices requirements) of this part and then complying with the requirements specified for process vents from continuous unit operations (nonhalogenated). a. Reduce emissions of acrylonitrile by using a flare meeting the requirements of subpart SS, §63.987 (flare requirements) of this part or b. Reduce emissions of acrylonitrile by 98 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(2) (process vent requirements) of this part.
A fiber spinning line that is a new or modified source.	The lines use a spin dope produced from either a suspension polymerization process or solution polymerization process,.	a. Reduce acrylonitrile emissions by 85 weight-percent or more. (For example, by enclosing the spinning and washing areas of the spinning line (as specified in paragraph (b)(4) of this section) and venting through a closed vent system and using any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a), of this part); or b. Reduce acrylonitrile emissions from the spinning line to less than or equal to 0.25 kilograms of acrylonitrile per megagram (0.5 pounds of acrylonitrile per ton) of acrylic and modacrylic fiber produced; or c. Reduce the AN concentration of the spin dope to less than 100 ppmw.

TABLE 2.—TO §63.1103(B)(3)(I)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (B)(3)(I) OF THIS SECTION?—Continued

If you own or operate	And if	Then you must
5. A fiber spinning line that is an existing source.	The spinning line uses a spin dope produced from a solution polymerization process.	Maintain records and report emissions as specified in §§63.1109 through 63.1110. Control of spinning line AN emissions is not required
6. A fiber spinning line that is an existing source.	The spinning line uses a spin dope pro- duced from a suspension polymeriza- tion process.	Reduce the AN concentration of the spin dope to less than 100 ppmw ^b , or
		 Reduce acrylonitrile emissions from the spinning line to less than or equal to 0.025 kilograms of acrylonitrile per megagram of acrylic and modacrylic fiber produced.
7. Equipment as defined under § 63.1101	It contains or contacts ≥10 weight-percent acrylonitrile c, and operates ≥300 hours per year.	Comply with the requirements of subpart TT (national emission standards for equipment leaks (control level 1)) or subpart UU (national emission standards for equipment leaks (control level 2)) of this part.

The mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in § 63.1104(i).

b The percent by weight organic HAP is determined according to the procedures specified in § 63.1107.

c The weight-percent organic HAP is determined for equipment according to procedures specified in § 63.1107.

(ii) The owner or operator must control organic HAP emissions from the acrylic and modacrylic fibers production facility by meeting the applicable requirements specified in table 3 of this section. The owner or operator must determine the facility acrylonitrile emission rate using the procedures specified in paragraph (b)(5) of this section. Applicability assessment procedures and methods are specified in §§ 63.1104 through 63.1107. An owner or

operator of an affected source does not have to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§ 63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 3. TO §63.1103(B)(3)(II).—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYL-IC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COM-PLYING WITH PARAGRAPH (B)(3)(II) OF THIS SECTION?

If you own or operate	Then you must control total organic HAP emissions from the affected source by
An acrylic and modacrylic fibers production affected source and your facility is an existing source.	Meeting all of following requirements: a. Reduce total acrylonitrile emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragraph (b)(2) of this section, and fiber spinning lines operated in your acrylic and modacrylic fibers production facility to less than or equal to 1.0 kilograms (kg) of acrylonitrile per megagram (Mg) of fiber produced. b. Determine the facility acrylonitrile emission rate in accordance with the require-
An acrylic and modacrylic fibers production affected source and your facility is a new source.	ments specified in paragraph(b)(5) of this section. Meeting all of following requirements: a. Reduce total acrylonitrile emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragaph (b)(2) of this section, and fiber spinning lines operated in the acrylic and modacrylic fibers production facility to less than or equal to 0.5 kilograms (kg) of acrylonitrile per megagram (Mg) of fiber produced. b. Determine the facility acrylonitrile emission rate in accordance with the requirements specified in paragraph (b)(5) of this section.

TABLE 3. TO §63.1103(B)(3)(II).—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYL-IC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (B)(3)(II) OF THIS SECTION?—Continued

If you own or operate	Then you must control total organic HAP emissions from the affected source by
3. Equipment as defined under §63.1101 and it contains or contacts > 10 weight-percent acrylonitrile,* and operates > 300 hours per year.	

^aThe weight-percent organic HAP is determined for equipment according to procedures specified in § 63.1107.

- (4) Fiber spinning line enclosure requirements. For an owner or operator of a new or modified source electing to comply with paragraph (b)(3)(i) of this section, the fiber spinning line enclosure must be designed and operated to meet the requirements specified in paragraphs (b)(4)(i) through (iv) of this section.
- (i) The enclosure must cover the spinning and washing areas of the spinning line.
- (ii) The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B.
- (iii) The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or to direct airflow into the enclosure.
- (iv) The owner or operator must perform the verification procedure for the enclosure as specified in section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.
- (5) Facility acrylonitrile emission rate determination. For an owner or operator electing to comply with paragraph (b)(3)(ii) of this section, the facility acrylonitrile emission rate must be determined using the requirements specified in paragraphs (b)(5)(i) through (iii) of this section.
- (i) The owner or operator must prepare an initial determination of the facility acrylonitrile emission rate.
- (ii) Whenever changes to the acrylic or modacrylic fiber production oper-

- ations at the facility could potentially cause the facility acrylonitrile emission rate to exceed the applicable limit of kilogram of acrylonitrile per Megagram of fiber produced, the owner or operator must prepare a new determination of the facility acrylonitrile emission rate.
- (iii) For each determination, the owner or operator must prepare and maintain at the facility site sufficient process data, emissions data, and any other documentation necessary to support the facility acrylonitrile emission rate calculation.
- (c) Hydrogen fluoride production applicability, definitions, and requirements—(1) Applicability—(i) Affected source—For the hydrogen fluoride production (as defined in paragraph (c)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (c)(1)(i)(A) through (D) of this section, that are associated with a hydrogen fluoride production process unit located at a major source as defined in section 112(a) of the Act.
- (A) All storage vessels used to accumulate or store hydrogen fluoride.
- (B) All process vents from continuous unit operations associated with hydrogen fluoride recovery and refining operations. These process vents include vents on condensers, distillation units, and water scrubbers.
- (C) All transfer racks used to load hydrogen fluoride into tank trucks or railcars.
- (D) Equipment in hydrogen fluoride service (as defined in paragraph (c)(2) of this section).
- (ii) *Compliance schedule.* The compliance schedule, for affected sources as defined in paragraph (c)(1)(i) of this section, is specified in §63.1102(a).
 - (2) Definitions.

Connector means flanged, screwed, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purposes of this subpart.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, openended valve or line, valve, connector, and instrumentation system in hydrogen fluoride service; and any control devices or closed-vent systems used to comply with this subpart.

Hydrogen fluoride production means a process engaged in the production and recovery of hydrogen fluoride by reacting calcium fluoride with sulfuric acid. For the purpose of implementing this subpart, hydrogen fluoride production is not a process that produces gaseous hydrogen fluoride for direct reaction with hydrated aluminum to form aluminum fluoride (i.e., the hydrogen fluoride is not recovered as an intermediate or final product prior to reacting with the hydrated aluminum).

In hydrogen fluoride service means that a piece of equipment either contains or contacts a hydrogen fluoride process fluid (liquid or gas).

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals below ambient pressure.

Instrumentation system means a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Valves and connectors are the predominant type of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems.

Kiln seal means the mechanical or hydraulic seals at both ends of the kiln, designed to prevent the infiltration of moisture and air through the interface of the rotating kiln and stationary pipes and equipment attached to the kiln during normal vacuum operation of the kiln (operation at an internal pressure of at least 0.25

kilopascal [one inch of water] below ambient pressure).

Leakless pump means a pump whose seals are submerged in liquid, a magnetically-driven pump, a pump equipped with a dual mechanical seal system that includes a barrier fluid system, a canned pump, or other pump that is designed with no externally actuated shaft penetrating the pump housing.

Open-ended valve or line means any valve, except relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the relief device. This release can be one release or a series of releases over a short time period due to a malfunction in the process.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

Relief device or valve means a valve used only to release an unplanned, non-routine discharge. A relief valve discharge can result from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage.

Repaired for the purpose of this regulation means equipment is adjusted, or otherwise altered, to eliminate a leak identified by sensory monitoring.

Sampling connection system means an assembly of equipment within a process unit or affected facility used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensory monitoring means the detection of a potential leak to the atmosphere by walk-through visual, audible, or olfactory monitoring. Comprehensive component-by-component inspection is not required.

Shift means the time a shift operator normally works, typically 8 or 12 hours.

(3) Requirements. Table 4 of this section specifies the hydrogen fluoride production source category applicability and control requirements for both existing and new sources. The owner or operator must control hydrogen fluoride emissions from each affected source emission point as speci-

fied in table 4. General compliance, recordkeeping, and reporting requirements are specified in §§ 63.1108 through 63.1112. Specific monitoring, recordkeeping, and reporting requirements are specified in table 4. Minimization of emissions from startups, shutdowns, and malfunctions, including those resulting from kiln seals must be addressed in the startup, shutdown, and malfunction plan required by §63.1111; the plan must also establish reporting and recordkeeping of such events. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 4. TO § 63.1103(c)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A HYDROGEN FLUORIDE PRODUCTION EXISTING OR NEW AFFECTED SOURCE?

If you own or operate	And if	Then you must
1. A storage vessel	The stored material is hydrogen fluoride	Reduce emissions of hydrogen fluoride by venting displacement emissions created by normal filling or emptying activities through a closed-vent system to a recovery system or wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. The minimum liquid flow rate to the scrubber that achieves a 99 weight-percent removal efficiency shall be established, and may be done so by design analysis. The liquid flow rate to the scrubber shall be continuously monitored and records maintained according to §63.996 and §63.998(b), (c), and (d)(3) of 40 CFR subpart SS of this part. The Periodic Report specified in §63.1110(a)(5) of this subpart shall include the information specified in §63.999(c) of 40 CFR subpart SS of this part, as applicable.
A process vent from continuous unit operations.	The vent stream is from hydrogen fluo- ride recovery and refining vessels.	Reduce emissions of hydrogen fluoride from the process vent by venting emissions through a closed-vent system to a wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. Monitoring, recordkeeping, and reporting of wet scrubber operation shall be in accordance with the requirements stated above for a wet scrubber controlling hydrogen fluoride emissions from a storage vessel.

TABLE 4. TO §63.1103(C)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A HYDROGEN FLUORIDE PRODUCTION EXISTING OR NEW AFFECTED SOURCE?—Continued

If you own or operate	And if	Then you must
3. A transfer rack	The transfer rack is associated with bulk hydrogen fluoride liquid loading into tank trucks and rail cars.	Reduce emissions of hydrogen fluoride by venting emissions through a closed-vent system to a recovery system or wet scrubber that is designed and operated to achieve a 99 weight-percent removal efficiency. Monitoring, recordkeeping, and reporting of wet scrubber operation shall be in accordance with the requirements stated above for a wet scrubber controlling HF emissions from a storage vessel. You also must load hydrogen fluoride into only tank trucks and railcars that have a current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR part 180 for tank trucks and 49 CFR 173.31 for railcars; or have been demonstrated to be vapor-tight (i.e. will sustain a pressure change of not more than 750 Pascals within 5 minutes after it is pressurized to a minimum or 4,500 Pascals) within the preceding 12 months.
4. Equipment	It is in hydrogen fluoride service and operates ≥ 300 hours per year and is not in vacuum service.	Control hydrogen fluoride emissions by using leakless pumps and by implementing a sensory monitoring leak detection program. Equipment that is excluded from sensory monitoring because it operates less than 300 hours per year or is in vacuum service shall be identified by list, location, or other method and the identity shall be recorded. An owner or operator is required to perform sensory monitoring at least once every shift, but no later than within 15 days. When a leak is detected, repair must begin within one hour and be completed as soon as practical. A record shall be kept of each leak detected and repaired including: equipment identification number, date and time the leak was detected and that repair was initiated, and the date of successful repair.

(d) Polycarbonate production applicability, definitions, and requirements—(1) Applicability—(i) Affected source. For the polycarbonate production (as defined in paragraph (d)(2) of this section) source category, the affected source shall comprise all emission points, in combination, listed in paragraphs (d)(1)(i)(A) through (D) of this section, that are part of a polycarbonate production process unit located at a major source as defined in section 112(a) of the Act. For the purposes of this rule, a polycarbonate production process unit is a unit that produces polycarbonate by interfacial polymerization from bisphenols and phosgene. Phosgene production units that are associated with polycarbonate production process units are considered to be part of the polycarbonate production process. A phosgene production unit consists of the reactor in which phosgene is formed and all equipment (listed in paragraphs (d)(1)(i)(A) through (D) of this section) downstream of the reactor that provides phosgene for the production of polycarbonate. Therefore, for the purposes of this rule, such a phosgene production unit is considered to be a polycarbonate production process unit.

(A) All storage vessels that store liquids containing organic HAP.

- (B) All process vents from continuous and batch unit operations.
 - (C) All wastewater streams.
- (D) Equipment (as defined in §63.1101 of this subpart) that contains or contacts organic HAP.
- (ii) *Compliance schedule*. The compliance schedule, for affected sources as defined in paragraph (d)(1)(i) of this section, is specified in §63.1102(a).

(2) Definitions.

production means a Polycarbonate process engaged in the production of a special class of polyester formed from any dihydroxy compound and any carbonate diester or by ester exchange. Polycarbonate may be produced by solution or emulsion polymerization, although other methods may be used. A typical method for the manufacture of polycarbonate includes the reaction of bisphenol-A with phosgene in the presence of pyridine or other catalyst to form polycarbonate. Methylene chloride or other solvents are used in this polymerization reaction.

(3) Requirements. Tables 5 and 6 of this section specify the applicability criteria and standards for existing and new sources within the polycarbonate production source category. The owner or operator must control organic HAP emissions from each affected source emission point by meeting the applicable requirements specified in tables 5 and 6. Applicability assessment procedures and methods are specified in §§ 63.1104 through 63.1107. An owner or operator of an affected source is not required to perform tests, TRE calculations or other applicability assessment procedures if they opt to comply with the most stringent requirements for an applicable emission point pursuant to this subpart. General compliance, recordkeeping, and reporting requirements are specified in §§ 63.1108 through 63.1112. Procedures for approval of alternative means of emission limitations are specified in §63.1113.

TABLE 5 TO §63.1103(D)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION EXISTING AFFECTED SOURCE?

If you own or operate	And if	Then you must
1. A storage vessel with: 75 cubic meters ≤ capacity < 151 cubic meters.	27.6 kilopascals ≤ maximum true vapor pressure of total organic HAP < 76.6 kilopascals.	Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in § 63.982(a)(1) (storage vessel requirements) of this part; or comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
 A storage vessel with: 151 cubic meters ≤ capacity. 	The maximum true vapor pressure of total organic HAP ≥ 5.2 kilopascals.	Reduce emissions of total organic HAP by 98 weight-percent by venting emis- sions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part
3. A storage vessel with: 75 cubic meters ≤ capacity < 151 cubic meters.	The maximum true vapor pressure of total organic HAP ≥ 76.6 kilopascals.	Reduce emissions of total organic HAP by 95 weight-percent by venting emis- sions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.

TABLE 5 TO § 63.1103(D)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION EXISTING AFFECTED SOURCE?—Continued

If you own or operate	And if	Then you must
A. A process vent from continuous unit operations or a combined vent stream a.	The vent stream has a TRE b.c ≤ 2.7	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process vent requirements) of this part and vent emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, §63.994, of this part, that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hour d, whichever is less stringent; or b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, §63.994 (halogen reduction device meeting the requirements of subpart SS, segish-percent; or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(2) (process vent requirements) of this part; or c. Achieve and maintain a TRE index value greater than 2.7.
 A process vent from continuous unit operations or a combined vent stream a. 	2.7 < TRE b.c ≤ 4.0	Monitor and keep records of equipment operating parameters specified to be monitored under subpart SS, §§ 63.990(c) (absorber, condenser, and carbon adsorber monitoring) or 63.995(c) (other noncombustion systems used as a control device monitoring) of this part.
6. Equipment as defined under § 63.1101	The equipment contains or contacts ≥5 weight-percent total organic HAPd, and operates ≥300 hours per year.	Comply with the requirements of subpart TT (national emission standards for equipment leaks (control level 1)) or subpart UU (national emission standards for equipment leaks (control level 2)) of this part.

^aCombined vent streams shall use the applicability determination procedures and methods for process vents from continuous unit operations (§ 63.1104).

^bThe TRE equation coefficients for halogenated streams (table 1 of § 63.1104(j)(1)) shall be used to calculate the TRE index

value.

value.

°The TRE is determined according to the procedures specified in §63.1104(j). If a dryer is manifolded with such vents, and the vent is routed to a recovery, recapture, or combustion device, then the TRE index value for the vent must be calculated based on the properties of the vent stream (including the contributions of the dryer). If a dryer is manifolded with other vents and not routed to a recovery, recapture, or combustion device, then the TRE index value must be calculated excluding the contributions of the dryer. The TRE index value for the dryer must be calculated separately in this case.

dThe mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in §63.1104(i).

°The weight-percent organic HAP is determined for equipment according to procedures specified in §63.1107.

Table 6. To §63.1103(d)—What Are My Requirements If I Own or Operate A Polycarbonate Production New Affected Source?

If you own or operate	And if	Then you must
1. A storage vessel with: 38 cubic meters ≤ capacity < 151 cubic meters.	13.1 kilopascals ≤ maximum true vapor pressure of total organic HAP < 76.6 kilopascalsa.	a. Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS (national emission standards for closed vent systems, control devices, recovery devices, and routing to a fuel gas system or a process), as specified in §63.982(a)(1) (storage vessel requirements) of this part; or b. Comply with the requirements of subpart WW (national emission standards for storage vessels (control level 2)) of this part.
 A storage vessel with: 151 cubic meters ≥ capacity. 	The vapor pressure of total organic HAP is ≥ 5.2 kilopascals.	Reduce emissions of total organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.
3. A storage vessel with: 38 cubic meters ≤ capacity < 151 cubic meters.	The vapor pressure of total organic HAP is \geq 76.6 kilopascals.	Reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in §63.982(a)(1) (storage vessel requirements) of this part.
A process vent from continuous unit operations or a combined vent stream a.	The vent stream has a a TREb,c ≤ 9.6	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in § 63.982(a)(2) (process vent requirements) of this part and vent emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, § 63.994, of this part that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hourd, whichever is less stringent; or b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, § 63.994 (halogen reduction device emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in § 63.982(a)(2) (process vent requirements) of this part; or

TABLE 6. TO § 63.1103(D)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION NEW AFFECTED SOURCE?—Continued

If you own or operate	And if	Then you must
5. Equipment as defined under §63.1101	The equipment contains or contacts ≥ 5 weight-percent HAPe, and operates ≥ 300 hours per year.	c. Achieve and maintain a TRE index value greater than 9.6 Comply with the requirements of 40 CFR subpart TT (national emission standards for equipment leaks (control level 1)) or subpart UU (national emission standards for equipment leaks (control level 2)) of this part.

^a Combined vent streams shall use the applicability determination procedures and methods for process vents from continuous unit operations (§63.1104).

b The TRE equation coefficients for halogenated streams (table 1 of §63.1104(j)(1)) shall be used to calculate the TRE index

value.

The weight-percent organic HAP is determined for equipment according to procedures specified in §63,1107.

§63.1104 Process vents from continuous unit operations: applicability assessment procedures and meth-

(a) General. The provisions of this section provide calculation and measurement methods for criteria that are required by §63.1103 to be used to determine applicability of the control requirements for process vents from continuous unit operations. The owner or operator of a process vent is not required to determine the criteria specified for a process vent that is being controlled in accordance with the applicable weight-percent or TOC concentration requirement in §63.1103.

(b) Sampling sites. For purposes of determining process vent applicability criteria, the sampling site shall be located as specified in (b)(1) through (4) of this section, as applicable.

(1) Sampling site location if TRE determination is required. If the applicability criteria specified in the applicable table of §63.1103 includes a TRE index value, the sampling site for determining volumetric flow rate, regulated organic HAP concentration, total organic HAP or TOC concentration, heating value, and TRE index value, shall be after the final recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present, and prior to release to the atmosphere.

(2) Sampling site location if TRE determination is not required. If the applicability criteria specified in the applicable table of §63.1103 does not include a TRE index value, the sampling site for determining volumetric flow rate, regulated organic HAP concentration, total organic HAP or TOC concentration, and any other specified parameter shall be at the exit from the unit operation before any control device.

- (3) Sampling site selection method. Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling site. No traverse site selection method is needed for process vents smaller than 0.10 meter (0.33 foot) in nominal inside diameter.
- (4) Sampling site when a halogen reduction device is used prior to a combustion device. An owner or operator using a scrubber to reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour (0.99 pound per hour) prior to a combustion control device in compliance with §63.1103 (as appropriate) shall determine the halogen atom mass emission rate prior to the combustion device according to the procedures in paragraph (i) of this section.
- (c) Applicability assessment requirement. The TOC or organic HAP concentrations, process vent volumetric flow rates, process vent heating values, process vent TOC or organic HAP emission rates, halogenated process vent determinations, process vent TRE

value.

°The TRE is determined according to the procedures specified in §63.1104(j). If a dryer is manifolded with such vents, and the vent is routed to a recovery, recapture, or combustion device, then the TRE index value for the vent must be calculated based on the properties of the vent stream (including the contributions of the dryer). If a dryer is manifolded with other vents and not routed to a recovery, recapture, or combustion device, then the TRE index value must be calculated excluding the contributions of the dryer. The TRE index value for the dryer must be calculated separately in this case.

d The mass emission rate of halogen atoms contained in organic compounds is determined according to the procedures specified in §63.1104(i)

index values, and engineering assessment process vent control applicability assessment requirements are to be determined during maximum representative operating conditions for the process, except as provided in paragraph (d) of this section, or unless the Administrator specifies or approves alternate operating conditions. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose

of an applicability test.

- (d) Exceptions. For a process vent stream that consists of at least one process vent from a batch unit operation manifolded with at least one process vent from a continuous unit operation, the TRE shall be calculated during periods when one or more batch emission episodes are occurring that result in the highest organic HAP emission rate (in the combined vent stream that is being routed to the recovery device) that is achievable during the 6-month period that begins 3 months before and ends 3 months after the TRE calculation, without causing any of the situations described in paragraphs (d)(1) through (3) to occur.
 - (1) Causing damage to equipment;
- (2) Necessitating that the owner or operator make product that does not meet an existing specification for sale to a customer; or
- (3) Necessitating that the owner or operator make produce in excess of demand.
- (e) TOC or Organic HAP concentration. The TOC or organic HAP concentrations, used for TRE index value calculations in paragraph (j) of this section, shall be determined based on paragraph (e)(1), (e)(2) or (k) of this section, or any other method or data that have been validated according to the protocol in method 301 of appendix A of this part. For concentrations needed for comparison with the appropriate control applicability concentra-tions specified in §63.1103, TOC or organic HAP concentration shall be determined based on paragraph (e)(1), (e)(2), or (k) of this section or any other method or data that has been validated according to the protocol in method 301 of appendix A of this part. The owner or operator shall record the TOC or organic HAP concentration as

specified in paragraph (1)(3) of this section.

- (1) Method 18. The procedures specified in paragraph (e)(1)(i) and (ii) of this section shall be used to calculate parts per million by volume concentration using method 18 of 40 CFR part 60, appendix A:
- (i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(ii) The concentration of either TOC (minus methane and ethane) or regulated organic HAP emissions shall be calculated according to paragraph (e)(1)(ii)(A) or (B) of this section, as ap-

plicable.

(A) The TOC concentration (C_{TOC}) is the sum of the concentrations of the individual components and shall be computed for each run using Equation

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Where:

- C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.
- = Concentration of sample component j of the sample i, dry basis, parts per million by volume
- n = Number of components in the sample.
- x = Number of samples in the sample run.
- (B) The regulated organic HAP or total organic HAP concentration (C_{HAP}) shall be computed according to Equation 1 in paragraph (e)(1)(ii)(A) of this section except that only the regulated or total organic HAP species shall be summed, as appropriate.

(2) Method 25A. The procedures specified in paragraphs (e)(2)(i) through (vi) of this section shall be used to calculate parts per million by volume concentration using Method 25A of 40 CFR

part 60, appendix A.

(i) Method 25A of 40 CFR part 60, appendix A shall be used only if a single organic HAP compound comprises greater than 50 percent of total organic

HAP or TOC, by volume, in the process vent.

The process vent composition (ii) may be determined by either process knowledge, test data collected using an appropriate Environmental Protection Agency method or a method or data validated according to the protocol in Method 301 of appendix A of part 63. Examples of information that could constitute process knowledge include calculations based on material balances, process stoichiometry, or previous test results provided the results are still relevant to the current process vent conditions.

(iii) The organic compound used as the calibration gas for Method 25A of 40 CFR part 60, appendix A shall be the single organic HAP compound present at greater than 50 percent of the total organic HAP or TOC by volume.

(iv) The span value for Method 25A of 40 CFR part 60, appendix A shall be equal to the appropriate control applicability concentration value specified in the applicable table(s) presented in §63.1103 of this subpart.

(v) Use of Method 25A of 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(vi) The owner or operator shall demonstrate that the concentration of TOC including methane and ethane measured by Method 25A of 40 CFR part 60, appendix A is below one-half the appropriate control applicability concentration specified in the applicable table for a subject source category in §63.1103 in order to qualify for a low organic HAP concentration exclusion.

(f) Volumetric flow rate. The process vent volumetric flow rate (Q_s), in standard cubic meters per minute at 20 °C, shall be determined as specified in paragraphs (f)(1) or (2) of this section and shall be recorded as specified in $\S63.1109$.

(1) Use Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate. If the process vent tested passes through a final steam jet ejector and is not condensed, the stream volumetric flow shall be corrected to 2.3 percent moisture; or

- (2) The engineering assessment procedures in paragraph (k) of this section can be used for determining volumetric flow rates.
- (g) Heating value. The net heating value shall be determined as specified in paragraphs (g)(1) and (2) of this section, or by using the engineering assessment procedures in paragraph (k) of this section.
- (1) The net heating value of the process vent shall be calculated using Equation 2:

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Where:

 H_T = Net heating value of the sample, megaJoule per standard cubic meter, where the net enthalpy per mole of process vent is based on combustion at $25^{\circ}\,C$ and 760 millimeters of mercury, but the standard temperature for determining the volume corresponding to 1 mole is $20^{\circ}\,C$, as in the definition of Q_s (process vent volumetric flow rate).

$$\begin{split} K_1 &= Constant, \ 1.740 \times 10^{-7} \ (parts \ per \ million)^{-1}(gram-mole \ per \ standard \ cubic \ meter) \ (megaJoule \ per \ kilocalorie), \\ where \ standard \ temperature \ for \ (gram-mole \ per \ standard \ cubic \ meter) \ is \ 20^{\circ} C. \end{split}$$

Dj = Concentration on a wet basis of compound j in parts per million, as measured by procedures indicated in paragraph (e)(2) of this section. For process vents that pass through a final stream jet and are not condensed, the moisture is assumed to be 2.3 percent by volume.

 H_j = Net heat of combustion of compound j, kilocalorie per gram-mole, based on combustion at 25°C and 760 millimeters mercury.

- (2) The molar composition of the process vent (D_j) shall be determined using the methods specified in paragraphs (g)(2)(i) through (iii) of this section:
- (i) Method 18 of 40 CFR part 60, appendix A to measure the concentration of each organic compound.
- (ii) American Society for Testing and Materials D1946-90 to measure the concentration of carbon monoxide and hydrogen.
- (iii) Method 4 of 40 CFR part 60, appendix A to measure the moisture content of the stack gas.

(h) TOC or Organic HAP emission rate. The emission rate of TOC (minus methane and ethane) (E_{TOC}) and the emission rate of the regulated organic HAP or total organic HAP (E_{HAP}) in the process vent, as required by the TRE index value equation specified in paragraph (j) of this section, shall be calculated using Equation 3:

ER29JN99.017

Where:

- $$\begin{split} E &= Emission \ rate \ of \ TOC \ (minus \ methane \\ & and \ ethane) \ (E_{TOC}) \ or \ emission \ rate \ of \ the \\ & regulated \ organic \ HAP \ or \ total \ organic \\ & HAP \ (E_{HAP}) \ in \ the \ sample, \ kilograms \ per \\ & hour. \end{split}$$
- $K_2=Constant,\ 2.494\times 10^{-6}$ (parts per million) $^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is $20^{\circ}C.$
- n = Number of components in the sample.
- C_j = Concentration on a dry basis of organic compound j in parts per million as measured by method 18 of 40 CFR part 60, appendix A as indicated in paragraph (e) of this section. If the TOC emission rate is being calculated, C_j includes all organic compounds measured minus methane and ethane; if the total organic HAP emission rate is being calculated, only organic HAP compounds are included; if the regulated organic HAP emission rate is being calculated, only regulated organic HAP compounds are included.
- M_{j} = Molecular weight of organic compound j, gram/gram-mole.
- $Q_s=Process$ vent flow rate, dry standard cubic meter per minute, at a temperature of $20^{\circ}C$.
- (i) Halogenated process vent determination. In order to determine whether a process vent is halogenated, the mass emission rate of halogen atoms contained in organic compounds shall be calculated according to the procedures specified in paragraphs (i)(1) and (2) of this section. A process vent is considered halogenated if the mass emission rate of halogen atoms contained in the organic compounds is equal to or greater than 0.45 kilograms per hour.
- (1) The process vent concentration of each organic compound containing halogen atoms (parts per million by volume, by compound) shall be determined based on one of the procedures

specified in paragraphs (i)(1)(i) through (iv) of this section:

- (i) Process knowledge that no halogen or hydrogen halides are present in the process vent, or
- (ii) Applicable engineering assessment as discussed in paragraph (k) of this section, or
- (iii) Concentration of organic compounds containing halogens or hydrogen halides as measured by Method 26 or 26A of 40 CFR part 60, appendix A, or
- (iv) Any other method or data that have been validated according to the applicable procedures in method 301 of appendix A of this part.
- (2) Equation 4 shall be used to calculate the mass emission rate of halogen atoms:

ER29JN99.018

Where:

- E = Mass of halogen atoms, dry basis, kilogram per hour,
- $K_2=$ Constant, 2.494 \times 10⁻⁶ (parts per million)⁻¹ (kilogram-mole per standard cubic meter) (minute per hour), where standard temperature is 20° C.
- Q = Flow rate of gas stream, dry standard cubic meters per minute, determined according to paragraph (f)(1) or (f)(2) of this section.
- n = Number of halogenated compounds j in the gas stream.
- j = Halogenated compound j in the gas stream.
- m = Number of different halogens i in each compound j of the gas stream.
- i = Halogen atom i in compound j of the gas stream
- C_j = Concentration of halogenated compound j in the gas stream, dry basis, parts per million by volume.
- L_{ji} = Number of atoms of halogen i in compound j of the gas stream.
- $$\begin{split} M_{ji} &= \text{Molecular weight of halogen atom i in} \\ &\text{compound j of the gas stream, kilogram} \\ &\text{per kilogram-mole.} \end{split}$$
- (j) TRE index value. The owner or operator shall calculate the TRE index value of the process vent using the equations and procedures in this paragraph, as applicable, and shall maintain records specified in paragraph (l)(1) or (m)(2) of this section, as applicable.

40 CFR Ch. I (7-1-99 Edition)

§ 63.1104

(1) TRE index value equation. The equation for calculating the TRE index value is Equation 5:

ER29JN99.019

Where:

TRE = TRE index value.

A, B, C, D = Coefficients presented in table 8 of this subpart.

E_{HAP} = Emission rate of total organic HAP, kilograms per hour, as calculated according to paragraph (h) or (k) of this section $\begin{array}{l} Q_s = process \ vent \ flow \ rate, \ standard \ cubic \\ meters \ per \ minute, \ at \ a \ standard \ temperature \ of \ 20^{\circ}C, \ as \ calculated \ according \\ to \ paragraph \ (f) \ or \ (k) \ of \ this \ section. \end{array}$

 $H_T=$ process vent net heating value, megaJoules per standard cubic meter, as calculated according to paragraph (g) or (k) of this section.

 $E_{\rm TOC}$ = Emission rate of TOC (minus methane and ethane), kilograms per hour, as calculated according to paragraph (h) or (k) of this section.

Table 1 of § 63.1104(J)(1).—Coefficients For Total Resource Effectiveness $^{\mbox{\tiny a}}$

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1000	Halogenated vent	S		Values of coefficients	oefficients	
Existing of new :			A	В	O	O
Existing	Yes	Thermal Inciner-	3.995	5.200×10 ⁻²	-1.769×10 ⁻³	9.700×10 ⁻⁴
	:	ator and scrub- ber.				
	No	_	1.935	3.660×10^{-1}	-7.687×10^{-3}	-7.33×10^{-4}
		Thermal Inciner-	1.492	6.267×10 ⁻²	3.177×10 ⁻²	-1.159×10^{-3}
		ator 0 Percent Recovery				
		Thermal Inciner-	2.519	1.183×10 ⁻²	1.300×10-2	4.790×10 ⁻²
		ator 70 Percent				
		Recovery				
New	Yes	Thermal Inciner-	1.0895	1.417×10 ⁻²	-4.82×10^{-3}	2.645×10 ⁻³
		ator and Scrub-				
		ber.				
	No	Flare	5.276×10 ⁻¹	9.98×10–2 ⁻²	-2.096×10^{-3}	-2.000×10^{-4}
		Thermal Inciner-	4.068×10 ⁻¹	1.71×10 ⁻²	8.664×10 ⁻³	-3.16×10^{-4}
		ator 0 Percent				
		Recovery				
		Thermal Inciner-	6.868×10 ⁻¹	3.21×10 ⁻³	3.546×10 ⁻³	1.306×10 ⁻²
		ator 70 Percent				
		Recovery				

^aUse according to procedures outlined in this section. Mulsom = Mega Joules per standard cubic meter scm/min = Standard cubic meters per minute

29

- (2) Nonhalogenated process vents. The owner or operator of a nonhalogenated process vent shall calculate the TRE index value by using the equation and appropriate nonhalogenated process vent parameters in table 1 of this section for process vents at existing and new sources. The lowest TRE index value is to be selected.
- (3) Halogenated process vents. The owner or operator of a halogenated process vent stream, as determined according to procedures specified in paragraph (i) or (k) of this section, shall calculate the TRE index value using the appropriate halogenated process vent parameters in table 1 of this section for existing and new sources.
- (k) Engineering assessment. For purposes of TRE index value determinations, engineering assessments may be used to determine process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate for the representative operating condition expected to yield the lowest TRE index value. Engineering assessments shall meet the requirements of paragraphs (k)(1) through (4) of this section. If process vent flow rate or process vent organic HAP or TOC concentration is being determined for comparison with the 0.011 standard cubic meters per minute (scmm) flow rate or the applicable concentration value presented in the tables in §63.1103, engineering assessment may be used to determine the flow rate or concentration for the representative operating condition expected to yield the highest flow rate or concentration.
- (1) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (j) of this section is greater than 4.0, then the owner or operator is not required to perform the measurements specified in paragraphs (e) through (i) of this section.
- (2) If the TRE index value calculated using such engineering assessment and the TRE index value equation in paragraph (j) of this section is less than or equal to 4.0, then the owner or operator is required either to perform the measurements specified in paragraphs (e) through (i) of this section for control applicability assessment or comply with the requirements (or standards)

specified in the tables presented in §63.1103 (as applicable).

- (3) Engineering assessment includes, but is not limited to, the examples specified in paragraphs (k)(3)(i) through (iv) of this section:
- (i) Previous test results, provided the tests are representative of current operating practices at the process unit.
- (ii) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.
- (iii) Maximum flow rate, TOC emission rate, organic HAP emission rate, organic HAP or TOC concentration, or net heating value limit specified or implied within a permit limit applicable to the process vent.
- (iv) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to those specified in paragraphs (k)(3)(iv)(A) through (k)(3)(iv)(D) of this section:
- (A) Use of material balances based on process stoichiometry to estimate maximum TOC or organic HAP concentrations,
- (B) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities,
- (C) Estimation of TOC or organic HAP concentrations based on saturation conditions, and
- (D) Estimation of maximum expected net heating value based on the stream concentration of each organic compound or, alternatively, as if all TOC in the stream were the compound with the highest heating value.
- (4) All data, assumptions, and procedures used in the engineering assessment shall be documented. The owner or operator shall maintain the records specified in paragraphs (l)(1) through (4) of this section, as applicable.
- (l) Applicability assessment record-keeping requirements. (1) TRE index value records. The owner or operator shall maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the process vent according to the procedures of paragraph (j) of this section, including those records associated with halogen vent stream

determination. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by $\S 63.1110(a)(4)$.

- (2) Flow rate records. The owner or operator shall record the flow rate as measured using the sampling site and flow rate determination procedures (if applicable) specified in paragraphs (b) and (f) of this section or determined through engineering assessment as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by §63.1110(a)(4).
- (3) Concentration records. The owner or operator shall record the regulated organic HAP or TOC concentration (if applicable) as measured using the sampling site and regulated organic HAP or TOC concentration determination procedures specified in paragraphs (e)(1) and (2) of this section, or determined through engineering assessment as specified in paragraph (k) of this section. As specified in paragraph (m) of this section, the owner or operator shall include this information in the Notification of Compliance Status report required by §63.1110(a)(4).
- (4) Process change records. The owner or operator shall keep up-to-date, readily accessible records of any process changes that change the control applicability for a process vent. Records are to include any recalculation or measurement of the flow rate, regulated organic HAP or TOC concentration, and TRE index value.
- (m) Applicability assessment reporting requirements. (1) Notification of Compliance Status. The owner or operator shall submit, as part of the Notification of Compliance Status report required by §63.1110(a)(4), the information recorded in paragraph (l)(1) through (3) of this section.
- (2) Process change. (i) Whenever a process vent becomes subject to control requirements under subpart SS of this part as a result of a process

- change, the owner or operator shall submit a report within 60 days after the performance test or applicability assessment, whichever is sooner. The report may be submitted as part of the next Periodic Report required by \$63.1110(a)(5). The report shall include the information specified in paragraphs (m)(2)(i)(A) through (C) of this section.
- (A) A description of the process change;
- (B) The results of the recalculation of the TOC or organic HAP concentration, flow rate, and/or TRE index value required under paragraphs (e), (f), and (j), and recorded under paragraph (l); and
- (C) A statement that the owner or operator will comply with the requirements specified in §63.1103 by the schedules specified in that section for the affected source.
- (ii) If a performance test is required as a result of a process change, the owner or operator shall specify that the performance test has become necessary due to a process change. This specification shall be made in the performance test notification to the Administrator, as specified in §63.999(a)(1).
- (iii) If a process change does not result in additional applicable requirements, then the owner or operator shall include a statement documenting this in the next Periodic Report required by §63.1110(a)(5) after the process change was made.
- (n) Parameter monitoring of certain process vents. An owner or operator who maintains a TRE index value (if applicable) in the applicable TRE index value monitoring range as specified in an applicable table presented in $\S 63.1103$ of this subpart without using a recovery device shall report a description of the parameter(s) to be monitored to ensure the process vent is operated in conformance with its design or process and achieves and maintains the TRE index value above the specified level, and an explanation of the criteria used to select parameter(s). An owner or operator who maintains a TRE index value (if applicable) in the applicable TRE index monitoring range as specified in an applicable table presented in §63.1103 of this subpart by using a recovery device shall comply with the requirements of §63.993(c).

§§ 63.1105-63.1106 [Reserved]

§63.1107 Equipment leaks: applicability assessment procedures and methods.

(a) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless an owner or operator demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed the percent by weight control applicability criteria specified in §63.1103 for an affected source on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used.

(b) An owner or operator may use good engineering judgment rather than the procedures in paragraph (a) of this section to determine that the percent organic HAP content does not exceed the percent by weight control applicability criteria specified in §63.1103 for an affected source. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (a) of this section shall be used to resolve the disagreement.

(c) If an owner or operator determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (a) of this section, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(d) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

§63.1108 Compliance with standards and operation and maintenance requirements.

(a) Requirements. (1) Except as provided in paragraph (a)(2) of this sec-

tion, the emission limitations and established parameter ranges of this part shall apply at all times except during periods of startup, shutdown, malfunction, or non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. During periods of startup, shutdown, or malfunction, the owner or operator shall follow the applicable provisions of the startup, shutdown, malfunction plan required by §63.1111. However, if a startup, shutdown, malfunction or period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the specific provisions to which it is subject, then that emission point shall still be required to comply with the applicable provisions of this subpart and any of the subparts that are referenced by this subpart during startup, shutdown, malfunction, or period of non-operation.

(2) If equipment leak requirements are referenced by this subpart for a subject source category, such requirements shall apply at all times except during periods of startup, shutdown, or malfunction, process unit shutdown (as defined in §63.1101), or non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.

(3) For batch unit operations, shutdown does not include the normal periods between batch cycles; and startup does not include the recharging of batch unit operations, or the transitional conditions due to changes in product.

(4) [Reserved]

(5) During startups, shutdowns, and malfunctions when the emission standards of this subpart and the subparts referenced by this subpart do not apply pursuant to paragraphs (a)(1) through (4) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions. The measures to be taken shall be identified in the startup, shutdown, and malfunction plan (if applicable), and may include, but are not limited to, air pollution control technologies, recovery

technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available. Compliance with an inadequate startup, shutdown, and malfunction plan developed pursuant to \$63.1111 is not a shield for failing to comply with good operation and maintenance requirements.

- (6) Malfunctions shall be corrected as soon as practical after their occurrence and/or in accordance with the source's startup, shutdown, and malfunction plan developed as specified under §63.1111.
- (7) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable, independent of emissions limitations or other requirements in relevant standards.
- (b) Compliance assessment procedures. Parameter monitoring: compliance with operating conditions. Compliance with the required operating conditions for the monitored control devices or recovery devices may be determined by, but is not limited to, the parameter monitoring data for emission points that are required to perform continuous monitoring. For each excursion except for excused excursions (as described in §63.998(b)(6)), and as provided for in paragraph (b)(2) of this section the owner or operator shall be deemed to have failed to have applied the control in a manner that achieves the required operating conditions.
- (2) Parameter monitoring: excursions. An excursion is not a violation in cases where continuous monitoring is required and the excursion does not count toward the number of excused excursions (as described §63.998(b)(6)), if the conditions of paragraphs (b)(2)(i) or (ii) of this section are met. Nothing in this paragraph shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this subpart or a subpart referenced by this subpart.
- (i) During periods of startup, shutdown, or malfunction (and the source is operated during such periods in accordance with the source's startup, shut-

down, and malfunction plan as required by §63.1111), or

- (ii) During periods of non-operation of the affected source or portion thereof (resulting in cessation of the emissions to which the monitoring applies).
- (3) Operation and maintenance procedures. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator. This information may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan under §63.1111), review of operation and maintenance records, and inspection of the affected source, and alternatives approved as specified in §63.1113.
- (4) Applicability and compliance assessment procedures. Applicability and compliance with standards shall be governed by, in part, but not limited to, the use of data, tests, and requirements according to paragraphs (b)(4)(i) through (iii) of this section. Compliance with design, equipment, work practice, and operating standards, including those for equipment leaks, shall be determined according to paragraph (b)(5) of this section.
- (i) Applicability assessments. Unless otherwise specified in a relevant test method required to assess control applicability, each test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in this subpart. The arithmetic mean of the results of the three runs shall apply when assessing applicability. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run if it meets the criteria specified in paragraphs (a)(4)(i)(A) through (D) of this section.
- (A) A sample is accidentally lost after the testing team leaves the site; or
- (B) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or
- (C) Extreme meteorological conditions occur:
- (D) Other circumstances occur that are beyond the owner or operator's control.

(ii) Performance test. The Administrator may determine compliance with emission limitations of this subpart based on, but not limited to, the results of performance tests conducted according to the procedures specified according to the procedures specified in §63.997 of this part, unless otherwise specified in this subpart or a subpart referenced by this subpart.

(iii) Operation and maintenance requirements. The Administrator may determine compliance with the operation and maintenance standards of this subpart by, but not limited to, evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in this subpart or a subpart referenced by this subpart.

(5) Design, equipment, work practice, or operational standards. The Administrator may determine compliance with design, equipment, work practice, or operational requirements by, but is not limited to, review of records, inspection of the affected source, and by evaluation of an owner or operator's conformance with operation and maintenance requirements as specified in this subpart, and in the subparts referenced

by this subpart.

(c) Finding of compliance. The Administrator may make a finding concerning an affected source's compliance with an emission standard or operating and maintenance requirement as specified in, but not limited to, paragraphs (a) and (b) of this section, upon obtaining all of the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable) and any information available to the Administrator to determine whether proper operation and maintenance practices are being used. Standards in this subpart and methods of determining compliance are in metric units followed by the equivalents in English units. The Administrator will make findings of compliance with the numerical standards of this subpart using metric units.

(d) *Compliance time*. All terms that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annually), unless speci-

fied otherwise in the section or subsection that imposes the requirement, refer to the standard calendar periods.

- (1) Notwithstanding time periods specified for completion of required tasks, time periods may be changed by mutual agreement between the owner or operator and the Administrator, as specified in §63.1110(h). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period
- (2) When the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraph (d)(2) (i) or (ii) of this section, as appropriate.
- (i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or
- (ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.
- (3) In all instances where a provision requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

§63.1109 Recordkeeping requirements.

(a) Maintaining notifications, records, and reports. Except as provided in paragraph (b) of this section, the owner or operator of each affected source subject to this subpart shall keep copies of notifications, reports and records required by this subpart and subparts referenced by this subpart for at least 5 years, unless otherwise specified under this subpart.

- (b) Copies of reports. If the Administrator has waived the requirement of §63.1110(g)(1) for submittal of copies of reports, the owner or operator is not required to maintain copies of the waived reports. This paragraph applies only to reports and not the underlying records that must be maintained as specified in this subpart and the subparts referenced by this subpart.
- (c) Availability of records. All records required to be maintained by this subpart or a subpart referenced by this subpart shall be maintained in such a manner that they can be accessed within 2 hours and are suitable for inspection. The most recent 2 years of records shall be retained onsite or shall be accessible to an inspector while onsite. The records of the remaining 3 years, where required, may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, computer disk, magnetic tape, or microfiche.
- (d) Control applicability records. Owners or operators shall maintain records containing information developed and used to assess control applicability under §63.1103 (e.g., combined total annual emissions of regulated organic HAP).

§63.1110 Reporting requirements.

- (a) Required reports. Each owner or operator of an affected source subject to this subpart shall submit the reports listed in paragraphs (a)(1) through (8) of this section, as applicable.
- (1) A Notification of Initial Startup described in paragraph (b) of this section, as applicable.
- (2) An Initial Notification described in paragraph (c) of this section.
 - (3) [Reserved]
- (4) A Notification of Compliance Status report described in paragraph (d) of this section.
- (5) Periodic Reports described in paragraph (e) of this section.
- (6) Application for approval of construction or reconstruction described in §63.5(d) of subpart A of this part.
- (7) Startup, Shutdown, and Malfunction Reports described in §63.1111 of this subpart.
- (8) Other reports. Other reports shall be submitted as specified elsewhere in

- this subpart and subparts referenced by this subpart.
- (b) Notification of initial startup. (1) Contents. An owner or operator of an affected source for which a notice of initial startup has not been submitted under §63.5, shall send the Administrator written notification of the actual date of initial startup of an affected source. This paragraph does not apply to an affected source in existence on the effective date of this rule.
- (2) Due date. The notification of the actual date of initial startup shall be postmarked within 15 days after such date
- (c) Initial Notification. Owners or operators of affected sources who are subject to this subpart shall notify the Administrator of the applicability of this subpart by submitting an Initial Notification according to the schedule described in paragraph (c)(1) of this section. The notice shall include the information specified in paragraphs (c)(2) through (7) of this section, as applicable. An application for approval of construction or reconstruction required under §63.5(d) of subpart A of this part may be used to fulfill the initial notification requirements.
- (1) The initial notification shall be postmarked within 1 year after the source becomes subject to this subpart.
- (2) Identification of the storage vessels subject to this subpart.
- (3) Identification of the process vents subject to this subpart.
- (4) Identification of the transfer racks subject to this subpart.
- (5) For equipment leaks, identification of the process units subject to this subpart.
- (6) Identification of other equipment or emission points subject to this subpart.
- (7) As an alternative to the requirements specified in paragraphs (c)(1) through (3) and (c)(5) of this section, process units can be identified instead of individual pieces of equipment. For this alternative, the kind of emission point in the process unit that will comply must also be identified.
- (d) Notification of Compliance Status.
 (1) Contents. The owner or operator shall submit a Notification of Compliance Status for each affected source subject to this subpart containing the

information specified in paragraphs (d)(1)(i) and (d)(1)(ii) of this section.

- (i) The Notification of Compliance Status shall include the information specified in this subpart and the subparts referenced by this subpart. Alternatively, this information can be submitted as part of a title V permit application or amendment.
- (ii) The Notification of Compliance Status shall include a statement from the owner or operator identifying which subpart he or she has elected to comply with, where given a choice, as provided for in §63.1100(g).
- (2) Due date. The owner or operator shall submit the Notification of Compliance Status for each affected source 240 days after the compliance date specified for the affected source under this subpart, or 60 days after completion of the initial performance test or initial compliance assessment, whichever is earlier. Notification of Compliance Status reports may be combined for multiple affected sources as long as the due date requirements for all sources covered in the combined report are met.
- (e) Periodic Reports. The owner or operator of an affected source subject to monitoring requirements of this subpart, or to other requirements of this subpart or subparts referenced by this subpart, where periodic reporting is specified, shall submit a Periodic Report.
- (1) Contents. Periodic Reports shall include all information specified in this subpart and subparts referenced by this subpart.
- (2) *Due date.* The Periodic Report shall be submitted semiannually no later than 60 days after the end of each 6-month period. The first report shall be submitted as specified in paragraph (e)(2)(i) or (ii), as applicable.
- (i) The first report shall be submitted no later than the last day of the month that includes the date 8 months (6 months and 60 days) after the date the source became subject to this subpart.
- (ii) For affected sources electing to comply with this subpart at initial startup, the first report shall cover the 6 months after the Notification of Compliance Status report is submitted. The first report shall be submitted no later than the last day of the month that in-

cludes the date 6 months after the Notification of Compliance Status report is submitted.

- (3) Overlap with title V reports. Information required by this subpart, which is submitted with a title V periodic report, need not also be included in a subsequent Periodic Report required by this subpart or subpart referenced by this subpart. The title V report shall be referenced in the Periodic Report required by this subpart.
- (f) General report content. All reports and notifications submitted pursuant to this subpart, including reports that combine information required under this subpart and a subpart referenced by this subpart, shall include the information specified in paragraphs (f)(1) through (4) of this section.
- (1) The name, address and telephone number (fax number may also be provided) of the owner or operator.
- (2) The name, address and telephone number of the person to whom inquiries should be addressed, if different than the owner or operator.
- (3) The address (physical location) of the reporting facility.
- (4) Identification of each affected source covered in the submission and identification of the subparts (this subpart and the subparts referenced in this subpart) that are applicable to that affected source. Summaries and groupings of this information are permitted.
- (g) Report and notification submission. (1) Submission to the Environmental Protection Agency. All reports and notifications required under this subpart shall be sent to the appropriate EPA Regional Office and to the delegated State authority, except that request for permission to use an alternative means of emission limitation as provided for in §63.1113 shall be submitted to the Director of the EPA Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, MD-10, Research Triangle Park, North Carolina, 27711. The EPA Regional Office may waive the requirement to submit a copy of any reports or notifications at its discretion.
- (2) Submission of copies. If any State requires a notice that contains all the information required in a report or notification listed in this subpart, an

owner or operator may send the appropriate EPA Regional Office a copy of the report or notification sent to the State to satisfy the requirements of this subpart for that report or notification.

- (3) Method of submission. Wherever this subpart specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent on or before the specified date.
- (4) Submission by electronic media. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.
- (h) Adjustment to timing of submittals and review of required communications. (1) Alignment with title V submission. An owner or operator may submit Periodic Reports required by this subpart on the same schedule as the title V periodic report for the facility. The owner or operator using this option need not obtain prior approval, but must ensure that no reporting gaps occur. The owner or operator shall clearly identify the change in reporting schedule in the first report filed under this paragraph. The requirements of paragraph (f) of this section are not waived when implementing this change.
- (2) Establishment of a common schedule. An owner or operator may arrange by mutual agreement (which may be a standing agreement) with the Administrator a common schedule on which periodic reports required by this subpart shall be submitted throughout the year as long as the reporting period is not extended. Procedures governing the implementation of this provision are specified in paragraphs (h)(3) through (7) of this section.
- (3) Submission requirements. Except as allowed by paragraph (h)(1) of this section, until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (h)(5) and (6) of this section, the owner or operator of an affected source remains strictly subject to the required submittal deadlines specified in this subpart and subparts referenced by this subpart.
- (4) Request for adjustment of reporting schedule. Except as allowed by paragraph (h)(1) of this section, an owner or

operator shall request the adjustment provided for in paragraphs (h)(5) and (6) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this subpart or subparts referenced by this subpart. A request for a change to the periodic reporting schedule need only be made once for every schedule change and not once for every semi-annual report submitted.

(5) Alteration of time periods or deadlines. Notwithstanding time periods or postmark deadlines specified in this subpart for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practical before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(6) Approval of request for adjustment. If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(7) Notification of delay. If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

§63.1111 Startup, shutdown, and malfunction.

(a) Startup, shutdown, and malfunction plan. (1) Description and purpose of plan. The owner or operator of an affected source shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail,

procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction. This plan shall also include a program of corrective action for malfunctioning process and air pollution control equipment used to comply with relevant standards under this subpart. The plan shall also address routine or otherwise predictable CPMS malfunctions. This plan shall be developed by the owner or operator by the affected source's compliance date under this subpart. The requirement to develop and implement this plan shall be incorporated into the source's title V permit. This requirement is optional for equipment that must comply with subparts TT or UU under this subpart. It is not optional for equipment equipped with a closed vent system and control device subject to this subpart and subpart SS of this part. The purpose of the startup, shutdown, and malfunction plan is described in paragraphs (a)(1)(i) and (ii) of this section.

- (i) To ensure that owners or operators are prepared to correct malfunctions as soon as practical after their occurrence, in order to minimize excess emissions of regulated organic HAP; and
- (ii) To reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
- (2) Operation of source. During periods of startup, shutdown, and malfunction, the owner or operator of an affected source subject to this subpart shall operate and maintain such affected source (including associated air pollution control equipment and CPMS) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (a)(1) of this section.
- (3) Use of additional procedures. To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator of an affected source may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided

the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

- (4) Revisions to the plan. Based on the results of a determination made under §63.1108(b)(3), the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan if the Administrator finds that the plan is inadequate as specified in paragraphs (a)(4)(i) through (iv) of this section:
- (i) Does not address a startup, shutdown, and malfunction event of the CPMS, the air pollution control equipment, or the affected source that has occurred; or
- (ii) Fails to provide for the operation of the affected source (including associated air pollution control equipment and CPMS) during a startup, shutdown, and malfunction event in a manner consistent with good air pollution control practices for minimizing emissions to the extent practical; or
- (iii) Does not provide adequate procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable; or
- (iv) Does not provide adequate measures to prevent or minimize excess emissions to the extent practical as specified in §63.1108(a)(5).
- (5) Additional malfunction plan requirements. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator shall revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the affected source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment or CPMS.
- (b) Startup, shutdown, and malfunction reporting requirements. (1) Periodic startup, shutdown, and malfunction reporting

requirements. If actions taken by an owner or operator during a startup, shutdown, and malfunction of an affected source, or of a control device or monitoring system required for compliance (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's plan, then the owner or operator shall state such information in a startup, shutdown, and malfunction report. During the reporting period, reports shall only be required for startups, shutdowns, and malfunctions during which excess emissions, as defined in §63.1108(a)(5), occur during the reporting period. A startup, shutdown, and malfunction report can be submitted as part of a Periodic Report required under §63.1110(a)(5), or on a more frequent basis if specified otherwise under this subpart or a subpart referenced by this subpart or as established otherwise by the permitting authority in the affected source's title V permit. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate), unless the information is submitted with the Periodic Report. The report shall include the information specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section.

(i) The name, title, and signature of the owner or operator or other responsible official certifying its accuracy.

(ii) The number of startup, shutdown, and malfunction events and the total duration of all periods of startup, shutdown, and malfunction for the reporting period if the total duration amounts to either of the durations in paragraphs (b)(1)(ii)(A) or (B) of this section. Records of the number of CPMS startup, shutdown, and malfunction events and the total duration of all periods of startup, shutdown, and malfunction for the reporting period are required under §63.998(c)(1)(ii)(C) and (D) of this section.

(A) Total duration of periods of malfunctioning of a CPMS equal to or greater than 5 percent of that CPMS operating time for the reporting period; or

(B) Total duration of periods of startup, shutdown, and malfunction for an affected source equal to or greater than 1 percent of that affected source's operating time for the reporting period.

(iii) Records documenting each startup, shutdown and malfunction event as required under §63.998(c)(1)(ii)(F).

(iv) Records documenting the total duration of operating time as required under §63.998(c)(1)(ii)(H).

(2) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for startup, shutdown, and malfunction reports under paragraph (b)(1) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) during which excess emissions occur is not consistent with the procedures specified in the affected source's plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, followed by a letter delivered or postmarked within 7 working days after the end of the event. The immediate report required under this paragraph shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in §63.1110(h).

(3) [Reserved]

§63.1112 Extension of compliance, and performance test, monitoring, recordkeeping and reporting waivers and alternatives.

(a) Extension of compliance. (1) Extension of compliance with emission standards. Until an extension of compliance

has been granted by the Administrator under this paragraph, the owner or operator of an affected source subject to the requirements of this subpart shall comply with all applicable requirements of this subpart.

(2) Extension of compliance for early reductions and other reductions. (i) Early reductions. Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D of this part.

(ii) Other reductions. Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) Request for extension of compliance. Paragraphs (a)(4) through (7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (a)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4) Requests for extensions of compliance for section 112 standards. (i) Section 112(d) standards. (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard shall be submitted in writing to the appropriate authority not later than 12 months before the affected source's compliance date specified in §63.1102) for sources that are not including emission points in an emissions average, or not later than 18 months before the affected source's compliance date (as specified in §63.1102) for sources that are including emission points in an emissions average. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards, e.g., a compliance date specified by the standard is less than 12 (or 18) months after the standard's effective date.

(ii) Section 112(f) standards. The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 15 days after the effective date of the relevant standard.

- (5) Requests for extensions of compliance for BACT or LAER. The owner or operator of an existing source who has installed BACT or technology required to meet LAER (as specified in paragraph (a)(2)(ii) of this section) prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.
- (6) *Contents of request.* (i) The request for a compliance extension under paragraph (a)(4) of this section shall include the following information:
- (A) A description of the controls to be installed to comply with the standard;
- (B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:
- (1) The date by which contracts for emission control systems or process changes for emission control will be awarded, or the date by which orders will be issued for the purchase of component parts to accomplish emission control or process changes;
- (2) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;
- (3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and
- (4) The date by which final compliance is to be achieved.
- (C) A description of interim emission control steps, that will be taken during

the extension period, including milestones to assure proper operation and maintenance of emission control and process equipment; and

- (D) Whether the owner or operator is also requesting an extension of other applicable requirements (e.g., performance testing requirements).
- (ii) The request for a compliance extension under paragraph (a)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.
- (7) Additional advice. Advice on requesting an extension of compliance may be obtained from the Administrator.
- (8) Approval of request for extension of compliance. Paragraphs (a)(9) through (14) of this section concern approval of an extension of compliance requested under paragraphs (a)(4) through (6) of this section.
- (9) General. Based on the information provided in any request made under paragraphs (a)(4) through (6) of this section, or other information, the Administrator may grant an extension of compliance with an emission standard, as specified in paragraphs (a)(4) and (5) of this section.
- (10) *Contents of extension.* The extension will be in writing and will—
- (i) Identify each affected source covered by the extension;
- (ii) Specify the termination date of the extension:
- (iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;
- (iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and
- (v)(A) Under paragraph (a)(4) of this section, specify any additional conditions that the Administrator deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or
- (B) Under paragraph (a)(5)of this section, specify any additional conditions

that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

- (11) Progress reports. The owner or operator of an existing source that has been granted an extension of compliance under paragraph (a)(10) of this section may be required to submit to the Administrator progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (a)(9) of this section.
- (12) Notifications to owners and operators regarding compliance extensions for section 112(d) standards. (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 days after receipt of sufficient information to evaluate a request submitted under paragraph (a)(4)(i) or (a)(5) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/ her application, that is, whether the application contains sufficient information to make a determination, within 30 days after receipt of the original application and within 30 days after receipt of any supplementary information that is submitted.
- (ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.
- (iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

- (A) Notice of the information and findings on which the intended denial is based; and
- (B) Notice of opportunity for the owner or operator to present in writing, within 15 days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.
- (iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 days after presentation of additional information or argument (if the application is complete), or within 30 days after the final date specified for the presentation if no presentation is made.
- (13) Notifications to owners and operators regarding compliance extensions for section 112(f) standards. (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 days after receipt of sufficient information to evaluate a request submitted under paragraph (a)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 days after receipt of the original application and within 15 days after receipt of any supplementary information that is submitted.
- (ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.
- (iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or

operator in writing of the Administrator's intention to issue the denial, together with—

- (A) Notice of the information and findings on which the intended denial is based; and
- (B) Notice of opportunity for the owner or operator to present in writing, within 15 days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.
- (iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 days after presentation of additional information or argument (if the application is complete), or within 30 days after the final date specified for the presentation if no presentation is made.
- (14) Termination of extension. The Administrator may terminate an extension of compliance at an earlier date than specified if any specification under paragraphs (a)(10)(iii) or (iv) of this section is not met.
 - (15) [Reserved]
- (16) Administrator's authority. The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.
- (b) Waiver of performance tests. (1) Applicability of this section. Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.
- (2) General. Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
- (3) Request to waive a performance test. (i) If a request is made for an extension of compliance under paragraph (a) of this section, the application for a waiv-

er of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if a site-specific test plan is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report, but it shall be submitted at least 60 days before the performance test if a site-specific test plan is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

- (4) Approval of request to waive performance test. The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (b)(3) of this section when he/she—
- (i) Approves or denies an extension of compliance under paragraph (a) of this section; or
- (ii) Approves or disapproves a sitespecific test plan; or
- (iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
- (iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
- (5) Administrator's authority. Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

- (c) Use of an alternative monitoring method. (1) General. Until permission to use an alternative monitoring method has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.
- (2) Alternatives to monitoring methods. After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:
- (i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;
- (ii) Alternative monitoring requirements when the affected source is infrequently operated;
- (iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;
- (iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;
- (v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;
- (vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;
- (vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;
- (viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or
- (ix) Alternative monitoring requirements when the effluent from a single

- affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.
- (3) Conflicts between alternative and required methods. If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.
- (4)(i) Request to use alternative monitoring method. An owner or operator who wishes to use an alternative monitoring method shall submit an application to the Administrator as described in paragraph (c)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring method is not used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring method is to be used to demonstrate compliance with a relevant standard, the application shall be submitted not later than with the site-specific test plan required, or with the site-specific performance evaluation plan (if requested), or at least 60 days before the performance evaluation is scheduled to begin.
- (ii) The application shall contain a description of the proposed alternative monitoring system and a performance evaluation test plan, if required. In addition, the application shall include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.
- (iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (c)(4)(i) of this section to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

- (5) Approval of request to use alternative monitoring method. (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 days after receipt of the original request and within 30 days after receipt of any supplementary information that is submitted. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—
- (A) Notice of the information and findings on which the intended disapproval is based; and
- (B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.
- (ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (c)(5)(i) of this section.
- (iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (c)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by this subpart or a subpart referenced by this subpart.
- (6) Alternative to the relative accuracy test. An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:
- (i) Criteria for approval of alternative procedures. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (c)(6)(ii)

- of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements specified in this subpart or subpart referenced by this subpart demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.
- (ii) Petition to use alternative to relative accuracy test. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification
- (iii) Rescission of approval to use alternative to relative accuracy test. The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the

relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

- (d) Waiver of recordkeeping or reporting requirements. (1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the recordkeeping and reporting requirements of this subpart and any subparts referenced by this subpart.
- (2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
- (3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under paragraph (a) of this section, any required compliance progress report or compliance status report required under this part or in the source's title V permit, or an excess emissions and continuous monitoring system per-

formance report required under §63.999(c) or another subpart referenced by this subpart, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of record-keeping or reporting is warranted.

- (4) The Administrator will approve or deny a request for a waiver of record-keeping or reporting requirements under this paragraph when he/she—
- (i) Approves or denies an extension of compliance under paragraph (a) of this section: or
- (ii) Makes a determination of compliance following the submission of a required Notification of Compliance Status report or excess emissions and continuous monitoring systems performance report: or
- (iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
- (5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.
- (6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§ 63.1113 Procedures for approval of alternative means of emission limitation.

(a) Alternative means of emission limitation. An owner or operator of an affected source may request a determination of alternative means of emission limitation to the requirements of design, equipment, work practice, or operational standards of this subpart or of a subpart referenced by this subpart. If, in the judgment of the Administrator, an alternative means of emission limitation will achieve a reduction in HAP emissions at least equivalent to the reduction in emissions from that source achieved under any design,

equipment, work practice, or operational standards (but not performance standards) in this subpart, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(1) The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

(2) Any such notice shall be published only after public notice and an opportunity for a hearing.

(b) Content of submittal. (1) In order to obtain approval, any person seeking permission to use an alternative means of compliance under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions. An owner or operator of an affected source seeking permission to use an alternative means of compliance who has not previously performed testing shall also submit a proposed test plan. If the owner or operator seeks permission to use an alternative means of compliance based on previously performed testing, they shall submit the results of testing, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring.

- (2) The owner or operator who requests an alternative means of emissions limitation shall submit a description of the proposed testing, monitoring, recordkeeping, and reporting that will be used and the proposed basis for demonstrating compliance.
- (3) For storage vessels, the owner or operator shall include the results of actual emissions tests using full-size or scale-model storage vessels that accurately collect and measure all regulated HAP emissions using a given control technique, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure, or an engineering analysis that the Administrator determines to be an accurate method of determining equivalence.
- (4) For proposed alternatives to equipment leak requirements referenced by this subpart, the owner or operator shall also submit the information specified in and meet the requirements for alternate means of emission limitation specified in the referenced subparts.